



## VEPCO Mitigation Plan

### Introduction

Shenandoah National Park is designated a Class I area in the 1977 Clean Air Act Amendments. As such, the National Park Service (NPS) strives to protect and enhance the air quality related values in the park (i.e., flora, fauna, aquatic resources, soils, cultural resources and visibility). The Environmental Protection Agency (EPA) and the states of New York, Connecticut, Virginia, and West Virginia alleged Virginia Electric & Power Company (VEPCO, now Dominion) of violations involving Subchapter 1 of the Clean Air Act, 42 U.S.C. Sections 7470- 7517, sometimes referred to as Prevention of Significant Deterioration or New Source Review Section of the Act. Subsequent litigation resulted in development of a Consent Decree. The Consent Decree includes provision of at least one million dollars for mitigation projects at Shenandoah National Park.

### Management Needs

Shenandoah National Park suffers from some of the worst air quality conditions in the National Park System. Its location in the Blue Ridge Mountains makes it susceptible to regional transport of pollutants from all directions. Local development and proximity to the Washington D.C. metropolitan area increase air pollution and its effects on the park's ecosystems. Existing air quality problems at the park include public health and vegetation effects from ozone, acid deposition and affected aquatic systems and resources, and visibility impairment.

Activities inside the park boundaries also contribute emissions, if only at a minimal level, compared to regional and transport stresses. Because of this, the park strives for reducing park- related emissions to the greatest extent practical. According to a July 2002 NPS emission inventory, total vehicle miles traveled (includes both visitor and NPS staff) is a major contributor to in- park emissions.

As per the requirements in Appendix C, Section VII of the Consent Order in *USA, et al v. VEPCO* entered on October 10, 2003, Shenandoah National Park prepared a plan of proposed mitigation projects to improve the air resources and related values in the park. This plan is designed to target and reduce NPS vehicle- related emissions in the park through the purchase and utilization of hybrid vehicles and EPA 2004 compliant Heavy- Duty Diesel vehicles (HDDV). Because public perception and public education are so important to the National Park Service mission, the benefits of using hybrid, alternative- fuels and/or cleaner HDDV extend well beyond pollutant emissions reductions. These vehicles will also create an opportunity for park staff to educate visitors and the

general public about hybrid and alternative- fueled vehicles and their environmental benefits.

In addition to ecological improvements, the projects can be used as a tool to further public education about air quality concerns in Shenandoah National Park. Public education can also extend to informing visitors about environmental leadership and its importance to sustainable park management.



### Current Activities

Funds have been deposited into a 19jj account. Section 19jj (16 U.S.C. 19jj) of the National Park System Resources Protection Act (P.L. 101- 337) allows the NPS to accept funds for restoration or mitigation of damages to resources and establishes appropriate fund management procedures. Once deposited into a 19jj account, funds are permanently earmarked for restoration and mitigation projects only, and in this case, for air quality mitigation projects at Shenandoah National Park as outlined in the plan. In addition, accounts under the 19jj program are managed as interest- bearing accounts. The NPS intends to utilize interest earned from the remaining balance of funds deposited in the 19jj account for yearly operation and maintenance and/or incremental costs associated with the purchase of fuels.

The mitigation plan is divided into three sections: (1) hybrid vehicles, (2) HDDV and (3) an educational component focused on how the vehicles benefit air resources at the park. Procurement of the hybrid vehicles and the HDDVs began in 2004. Vehicle signs have also been purchased.

Progress reports are prepared and include an assessment of how funds were spent, calculation of operation and maintenance costs, identification of any issues or problems



## VEPCO Mitigation Plan (continued...)

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with plan implementation, and approximation of air quality benefits from the projects. The NPS will evaluate the overall success of the plan after the first five years. Thereafter, options for any remaining 19jj funds will be developed. As per 19jj authorities stated above, any remaining funds will be used only for projects that will result in mitigation of park resources through continued reduction of in- park emissions. Such options may include expanded use of hybrid or HDDVs and/or retrofitting or replacing diesel generators or boilers.

### References

National Park Service. 2004. Proposed\* Mitigation Plan. Shenandoah National Park, Luray, Virginia.

\* Although this is titled "Proposed" the Plan has been approved and is in operation